

Submit within 45 days of well completion	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505	Revised November 6, 2013				
		1. WELL API NO: 30-015-43443				
		2. Well Name: CEDAR LAKE FEDERAL CA #646H				
		3. Well Number: 646H				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:E Lot:5 Section:6 Township:17S Range:31E Feet from:1980 N/S Line:N Feet from:330 E/W Line:W				
		5. Bottom Hole Location: Unit:E Lot:5 Section:6 Township:17S Range:31E Feet from:1980 N/S Line:N Feet from:330 E/W Line:W				
		6. Istitude: longitude: 32.865193 -103.915191				
		7. County: Eddy				
8. Operator Name and Address: APACHE CORP 303 Veterans Airpark Lane Suite 3000 Midland 79705		9. OGRID: 873	10. Phone Number: 432-818-1062			
11. Last Fracture Date: 7/30/2016 Frac Performed by: Rock pile		12. Production Type: O				
13. Pool Code(s): 96831		14. Gross Fractured Interval: 5,238 ft to 9,687 ft				
15. True Vertical Depth (TVD): 4,808 ft		16. Total Volume of Fluid Pumped: 34,665,961 gals				
17. Total Volume of Re-Use Water Pumped: N/A		18. Percent of Re-Use Water in Fluid Pumped: Not Disclosed				
19. HYDRAULIC FLUID COMPOSITION AND CONCENTRATION:						
Trade Name	Supplier	Purpose	Ingredients	(CAS #) Chemical Abstract Service #	Maximum Ingredient Concentration in Additive (% by mass)	Maximum Ingredient Concentration in HF Fluid (% by mass)
Fresh Water	Operator	Carrier Fluid	Water	7732-18-5	100%	82.6189151%
Proppant (Sand)	RockPile Energy	Propping Agent	Crystalline Silica, quartz	14808-60-7	100%	11.52485%
Ecopol-NE601	RockPile Energy	Non-emulsifying Agent	Coconut Diethanolamide	68603-42-9	25%	0.000722%
Ecopol-NE601	RockPile Energy	Non-emulsifying Agent	Methanol	64-17-5	50%	0.001444%
Ecopol-NE601	RockPile Energy	Non-emulsifying Agent	Triethylene Glycol	112-27-6	15%	0.0004332%
Ecopol-NE601	RockPile Energy	Non-emulsifying Agent	Water	7732-18-5	30%	0.0008664%
15% HCl	RockPile Energy	Acid	Hydrochloric Acid	7647-01-0	15%	0.4997974%
15% HCl	RockPile Energy	Acid	Water	7732-18-5	85%	2.8321853%
Citric Acid	Univar	Acid Additive	Water	7732-18-5	65%	0.0049864%
Citric Acid	Univar	Acid Additive	Citric Acid	77-92-9	50%	0.0038357%
Clayplex 650	Chemplex	Clay Contol	Ethananminium, 2-hydroxy-N, N, N-trimethyl-, chloride	67-48-1	35%	0.002151%
Clayplex 650	Chemplex	Clay Contol	Water	7732-18-5	55%	0.0033802%
Plexslick 953	Chemplex	Friction Reducer	Distillates, Petroleum, Hydrotreated Light	64742-47-8	19%	0.0091486%
Plexcide 15g	Chemplex	Biocide	Glutaraldehyde	111-30-8	20%	0.0017651%
Plexcide 15g	Chemplex	Biocide	Didecyldimethylammonium Chloride	7173-51-5	3%	0.0002648%
Plexcide 15g	Chemplex	Biocide	Quarternary Ammonium Compounds, Benzyl-C12- C16-alkyldimethyl, Chlorides	68424-85-1	3%	0.0002648%
AP Surf 2	Blentech	Surfactant	isopropyl alcohol	67-63-0	45%	0.0133596%
Greenhib 679	Chemplex	Scale Inhibitor	Scale inhibitor	Proprietary	40%	0.0108298%
Greenhib 679	Chemplex	Scale Inhibitor	Glycerine	56-81-5	30%	0.0081223%
Innopro RC 40/70	US Silica	Propping Agent	Crystalline Silica (quartz)	14808-60-7	98%	2.298731%
Innopro RC 40/70	US Silica	Propping Agent	Phenol-formaldehyde copolymer	9003-35-4	5%	0.1172822%
Innopro RC 40/70	US Silica	Propping Agent	Hexamine	100-97-0	40%	0.9382576%
Mayoquest 1900	Chemplex	Scale Inhibitor	Bis-triamine	34690-00-1	50%	0.0190092%
Mayoquest 1900	Chemplex	Scale Inhibitor	Hydrochloric acid	7647-01-0	6%	0.0022811%
Mayoquest 1900	Chemplex	Scale Inhibitor	Water	7732-18-5	44%	0.0167281%
20. I, as Operator, hereby certify that the information shown on this disclosure form is true and complete to the best of my knowledge and belief.						
Signature: Signed Electronically		Printed Name: Emily Follis		Title: Sr Prod Dept Asst		
Date: 8/18/2016						
E-mail Address: emily.follis@apachecorp.com						

NMOCD does not require the reporting of information beyond MSDS data as described in 29 CFR 1910.1200. NMOCD does not require the reporting or disclosure of proprietary, trade secret or confidential business information.